

# Ratios and Proportions

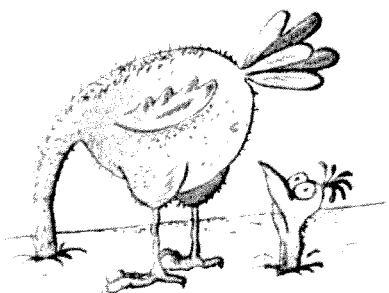
Name \_\_\_\_\_

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*Directions:* Find the solutions to the following questions in the Answer Bank. All answers should be in simplest form. Place the letter of the answer above the question number in the coded message. Decode the message.



$\frac{12}{10} \frac{12}{12}$

$\frac{9}{3} \frac{15}{15}$

$\frac{13}{6} \frac{3}{17}$

$\frac{16}{16} \frac{16}{16}$

$\frac{7}{6}$

$\frac{3}{2} \frac{8}{5} \frac{10}{4} \frac{11}{19} \frac{2}{2}$

$\frac{1}{9} \frac{1}{1}$

$\frac{10}{2}$

$\frac{18}{10} \frac{14}{14} \frac{1}{5}$

$\frac{8}{11} \frac{7}{6}$

$\frac{10}{8} \frac{2}{2}$

$\frac{18}{5} \frac{7}{10} \frac{6}{6}$

1. Write in simplest form:  $\frac{27}{81}$
2. Write in simplest form: the ratio of 28 feet to 49 feet
3. Write as a fraction: 15 to 65
4. Write as a fraction in simplest form: 38 minutes to 12 minutes
5. A mixture contains 35 ml. of water and 15 ml. of juice. State the ratio of juice to water.
6. A choir consists of 14 men and 8 women. State the ratio of men to women.
7. Find the missing value:  $\frac{2}{3} = \frac{4}{\boxed{\phantom{00}}}$
8. Find the missing value:  $\frac{3}{16} = \frac{12}{\boxed{\phantom{00}}}$
9. Find the value of  $x$ :  $\frac{x}{21} = \frac{3}{7}$
10. Find the value of  $n$ :  $\frac{n}{24} = \frac{20}{60}$
11. Find the value of  $t$ :  $\frac{3}{24} = \frac{t}{120}$

12. Find the value of  $x$ :  $\frac{12}{x} = \frac{3}{5}$

13. Find the missing value:  $\frac{70 \text{ women}}{25 \text{ men}} = \frac{14 \text{ women}}{\boxed{\phantom{00}} \text{ men}}$

14. Find the missing value:  $\frac{\boxed{\phantom{00}} \text{ grams}}{15 \text{ liters}} = \frac{12 \text{ grams}}{45 \text{ liters}}$

15. Find the value of  $x$ :  $\frac{6}{5} = \frac{54}{x}$

16. Two teachers are to 50 students as 6 teachers are to \_\_\_\_\_ students.

17. If 2 inches on a map represents 190 miles, 6 inches represents \_\_\_\_\_ miles on the same map.

18. Find the value of  $n$ :  $\frac{10 \text{ miles}}{4 \text{ hours}} = \frac{25 \text{ miles}}{n \text{ hours}}$

19. A class is attended by 16 boys and 28 girls. Write the ratio of boys to students in the class as a fraction in simplest form.

### ANSWER BANK

<b>A</b> 6	<b>B</b> 10	<b>C</b> $3\frac{1}{6}$	<b>D</b> 20	<b>E</b> $\frac{1}{3}$
<b>G</b> 4	<b>H</b> 15	<b>I</b> 8	<b>K</b> 5	<b>N</b> $\frac{7}{4}$
<b>O</b> $\frac{3}{13}$	<b>R</b> $\frac{3}{7}$	<b>S</b> $\frac{4}{7}$	<b>T</b> 64	<b>U</b> 45
<b>W</b> 570	<b>Y</b> 9	<b>'</b> $\frac{4}{11}$ apostrophe	<b>•</b> 150	

